

Mineral Industry Surveys

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MANGANESE IN APRIL 2006

On a gross-weight basis, reported consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 30,400 metric tons (t) in April 2006, which was an 11% increase compared with that in March 2006, according to the U.S. Geological Survey. This figure increases to 32,800 t when estimates for annual respondents are added on the basis of 2005 data. Corresponding industry stocks of ore at the end of the month were 263,000 t, which includes an estimate for annual respondents on the basis of 2005 data. This was a 6% decrease from that of March 2006.

The following comparisons of trade data were made on the basis of manganese content (table 1). The data for March 2006 tabulated in this report indicate that the total exports of 1,720 t were 37% higher than those of the prior month, owing to an increase in exports of ferromanganese. Manganese imports were 52,300 t, which was a decrease of 35% compared with those of February 2006. This decrease was primarily attributable to decreases in manganese ore and silicomanganese imports.

Ferroalloy Prices, manganese content

	High-carbon ferromanganese ¹ (dollars per gross ton)	Medium-carbon ferromanganese ¹ (cents per pound)	Silicomanganese ¹ (cents per pound)	Manganese metal ² (cents per pound)
April 6	755.00-780.00	64.00-66.00	36.00-38.00	71.00-76.00
April 13	755.00-780.00	64.00-66.00	36.00-38.00	72.00-76.00
April 20	760.00-780.00	64.00-66.00	36.00-38.00	72.00-76.00
April 27	760.00-780.00	64.00-66.00	36.00-38.00	69.00-71.00

Ore Prices, dollars per metric ton unit, manganese content³

	44% Manganese Ore ²	48% Manganese Ore ²
April 6	1.85-1.95	2.30-2.40
April 13	1.85-1.95	2.30-2.40
April 20	1.85-1.95	2.30-2.40
April 27	1.85-1.95	2.30-2.40

¹Source: Platts Metals Week, dealer import price.

²Source: Ryan's Notes, North American transaction price.

³To determine dollars per metric ton, multiply the manganese content percentage by the price.

TABLE 1
SELECTED U.S. FOREIGN TRADE IN MANGANESE¹

(Metric tons, manganese content)²

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2005:						
March ^f	22,300	42,000	64,300	206	1,160	1,360
January-March ^f	70,700	116,000	187,000	479	3,280	3,760
2006:						
January	20,300	25,600	45,900	46	1,710	1,760
February	27,500	52,600	80,100	87	1,170	1,260
March	4,970	47,400	52,300	63	1,660	1,720
Total	52,700	126,000	178,000	196	4,540	4,740

^fRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

Source: U.S. Census Bureau.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN MARCH 2006¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Australia	3,500	2,330	\$2,240,000	5,820	3,880	\$3,690,000
Georgia	--	--	--	7,000	4,600	4,600,000
Korea, Republic of	4,000	2,630	2,760,000	10,000	6,480	7,180,000
Mexico	1,700	1,110	1,190,000	3,730	2,440	2,550,000
Norway	8,820	4,660 ³	8,740,000	21,800	13,000	19,800,000
South Africa	13,100	8,630	8,520,000	39,400	26,000	24,900,000
Total	31,100	19,400	23,400,000	87,700	56,300	62,700,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN MARCH 2006¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Low carbon:						
China	1,280	1,110	\$1,730,000	2,880	2,550	\$4,090,000
Korea, Republic of	470	395	512,000	6,310	5,150	6,090,000
Mexico	959	775	993,000	2,580	2,080	2,630,000
Norway	142	116	169,000	142	116	169,000
South Africa	508	469	725,000	882	810	1,340,000
Total, low carbon	3,360	2,860	4,130,000	12,800	10,700	14,300,000
Medium carbon, (m.c.) 1%-2% C:						
Korea, Republic of	2,000	1,600	1,260,000	3,300	2,660	2,380,000
Mexico	1,550	1,240	1,160,000	4,170	3,320	3,600,000
South Africa	3,790	3,090	2,860,000	7,630	6,220	5,750,000
Total, m.c., 1%-2% C	7,340	5,930	5,270,000	15,100	12,200	11,700,000
Medium carbon, 2%-4% C:						
Brazil	19	14	19,300	19	14	19,300
Total, m.c., 2%-4% C	19	14	19,300	19	14	19,300
High carbon:						
Australia	1,000	778	530,000	3,500	2,550	1,970,000
Brazil	1,500	1,180	722,000	3,010	2,370	1,400,000
Canada	97	58 ³	61,200	97	58	61,200
China	20	18 ³	28,600	20	18	28,600
France	--	--	--	1,500	1,170	764,000
Mexico	2	2 ³	2,500	8	6	8,210
South Africa	18,800	14,500	10,100,000	43,600	33,800	22,500,000
Total, high carbon	21,400	16,600	11,400,000	51,800	40,000	26,700,000
Grand total	32,100	25,400	20,900,000	79,700	62,900	52,800,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN MARCH 2006^{1,2}

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	Year to date		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese:						
Brazil	42	23 ⁴	\$19,300	42	23	\$19,300
China	--	--	--	926	301	54,100
Total	42	23	19,300	968	324	73,400
47% or more manganese:						
Australia	--	--	--	11,100	5,650	1,580,000
Belgium	18	13	15,000	55	38	45,000
Brazil	1,440	718	86,100	2,920	1,470	208,000
China	--	--	--	993	497	59,600
Gabon	6,000	3,120	1,160,000	81,400	40,100	7,990,000
Morocco	--	--	--	20	17	6,000
Total	7,450	3,850	1,260,000	96,400	47,800	9,880,000
Grand total	7,500	3,870	1,280,000	97,400	48,100	9,960,000

-- Zero.

¹Quantities for general imports and imports for consumption are identical.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

⁴All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN MARCH 2006¹

(Metric tons, gross weight)

Source	Quantity	Customs value ²	Year to date	
			Quantity	Customs value ²
Australia	--	--	904	\$1,200,000
Belgium	118	261,000	236	601,000
Brazil	6	10,000	66	40,400
China	1,190	1,290,000	4,730	5,050,000
Colombia	--	--	4	6,750
France	2	21,600	3	25,500
Germany	--	--	23	116,000
Japan	521	740,000	1,500	2,070,000
Mexico	--	--	150	183,000
United Kingdom	(3)	9,000	(3)	11,300
Total	1,840	2,330,000	7,610	9,310,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN MARCH 2006¹

(Metric tons)

Source	Gross weight	Customs value ²	Year to date	
			Gross weight	Customs value ²
Unwrought flake:				
China	737	\$1,050	1,910	\$2,710
South Africa	655	1,190	1,250	2,260
Total	1,390	2,240	3,160	4,970
Unwrought powder:				
China	580	857	757	1,040
South Africa	256	444	591	1,050
Total	836	1,300	1,350	2,090
Unwrought, other:				
China	60	96	60	96
Germany	76	138	292	542
South Africa	140	247	440	746
Spain	71	128	371	617
Total	348	609	1,160	2,000
Other manganese, wrought:				
Brazil	--	--	294	210
China	--	--	266	347
France	1	11	11	109
Total	1	11	571	666
Grand total	2,580	4,160	6,240	9,720

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Note: Imports for consumption of metallic manganese waste and scrap totaled 68 tons, all of which was from Canada, to give a year-to-date total of 331 tons.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE,
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN MARCH 2006¹

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal ²	
	March	Year to date	March	Year to date	March	Year to date	March	Year to date
Australia	--	--	--	--	--	5	--	--
Belgium	--	--	--	--	--	--	194	636
Brazil	--	--	--	--	--	--	4	4
Canada	107	288	1,460	3,420	11	11	33	117
Chile	--	--	--	--	--	--	7	7
China	--	35	--	--	--	--	--	--
Colombia	--	--	--	--	--	--	--	1
Dominican Republic	--	9	--	--	--	--	--	--
France	--	--	--	--	--	--	4	4
Germany	--	--	--	--	--	--	19	35
Hong Kong	--	--	--	--	--	--	1	1
Indonesia	--	20	--	--	--	--	--	--
Japan	--	--	--	--	--	--	43	154
Malaysia	--	--	--	--	--	--	--	3
Mexico	--	--	--	--	9	32	6	7
Netherlands	--	--	--	100	--	9	--	--
Poland	--	21	--	--	--	--	--	--
Portugal	--	--	--	--	--	--	--	2
Sweden	19	19	--	--	--	--	--	16
Trinidad and Tobago	--	--	--	--	--	--	--	1
Total	125	392	1,460	3,520	21	58	311	987

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manganese-aluminum, some other alloys, and waste and scrap.

Note: Exports of ferromanganese with more than 2% carbon totaled 222 tons, all of which 187 tons went to Brazil, and 34 went to Malaysia to give a year-to-date total of 929 tons.

Source: U.S. Census Bureau.

TABLE 8
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN MARCH 2006, BY CLASS¹

Class	Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)	Year to date		
				Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	637	\$724	China 367; \$436	1,660	\$1,600	China 785; \$958
Manganites, manganates, and other permanganates	--	--	--	8	17	Japan 8; \$17
Potassium permanganate	85	191	India 36; \$86	255	558	Czech Republic 109; \$235
Sulfates, basket category, including manganese sulfate	4,790	3,220	China 3,210; \$1,600	13,400	7,920	China 7,140; \$3,250
Exports:						
Manganese dioxide	493	532	Canada 231; \$153	1,380	1,280	Canada 765; \$463
Manganese oxides other than dioxide	1,990	1,050	Canada 1,650; \$576	5,710	2,880	Canada 5,060; \$1,840
Manganites, manganates, and other permanganates	7	16	Canada 7; \$16	14	31	Canada 14; \$31
Potassium permanganate	284	722	Spain 133; \$294	1,020	2,470	Spain 695; \$1,510
Sodium permanganate	56	355	Japan 16; \$37	123	522	Japan 31; \$75
Sulfates, basket category, including manganese sulfate	1,790	1,230	Canada 1,250; \$551	4,660	3,520	Canada 3,320; \$1,700

-- Zero.

¹Data are rounded to no more than three significant digits.

²For imports, Customs value; for exports, free alongside ship value.

Source: U.S. Census Bureau.